

Appln No.: 09/937,192

Amendment Dated: April 17, 2005/Corrected claims filed April 17, 2005

Reply to Office Action of June 25, 2004

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (currently amended) A chemical compound comprising first and second hsp-binding moieties which bind to the pocket of hsp90 with which ansamycin antibiotics bind leading to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation, said binding moieties being connected to one another by a linker, wherein the first and second hsp-binding moieties each retain the ability in the chemical compound to bind to the pocket of hsp90 and lead to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation.

2. (currently amended) The chemical compound according to claim 1, wherein at least one of the first hsp-binding moieties is an ansamycin antibiotic geldanamycin, and the linker is connected to the 17-carbon of the geldanamycin.

3-5. (canceled)

6. (previously presented) The chemical compound of claim 2, wherein the linker has a length of 4 to 7 carbon atoms.

7. (previously presented) The chemical compound of claim 6, wherein the linker has a length of 4 carbon atoms.

8-11. (canceled)

12. (currently amended) A method for destruction of cells expressing a HER-family tyrosine kinase, comprising administering to the cells a chemical compound comprising first and second hsp-binding moieties which bind to the pocket of hsp90 with which ansamycin antibiotics bind leading to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation, said binding moieties being connected to one another by a linker, wherein the first and second hsp-binding moieties each retain the ability in the chemical compound to bind to the pocket of hsp90 and lead to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation.

13. (currently amended) A method for treating cancer in a patient suffering from cancer, comprising administering to the patient a therapeutic composition comprising a chemical compound comprising first and second hsp-binding moieties which bind

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to the pocket of hsp90 with which ansamycin antibiotics bind leading to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation, said binding moieties being connected to one another by a linker, wherein the first and second hsp-binding moieties each retain the ability in the chemical compound to bind to the pocket of hsp90 and lead to degradation in proteasomes of a subset of proteins requiring hsp90 for conformational maturation.

14. (canceled)

15. (currently amended) The method according to claim 13, wherein at least one of the hsp-binding moieties is geldanamycin, and the linker is connected to the 17-carbon of the geldanamycin.

16. (previously presented) The method according to claim 15, wherein the linker has a length of 4 to 7 carbon atoms.

17. (previously presented) The method according to claim 16, wherein the linker has a length of 4 carbon atoms.

18. (previously presented) The chemical compound of claim 1, wherein the linker is a substituted carbon chain.

19. (previously presented) The chemical compound of claim 18, wherein the linker is a substituted carbon chain incorporating a secondary or tertiary amine.

20. (previously presented) The chemical compound of claim 19, wherein the linker is an N-methyl amino linker.

21. (currently amended) The method according to claim 14, wherein at least one of the hsp-binding moieties is geldanamycin, and the linker is connected to the 17-carbon of the geldanamycin.

22. (previously presented) The chemical compound of claim 3, wherein the linker is a substituted carbon chain.

23. (previously presented) The chemical compound of claim 22, wherein the linker is a substituted carbon chain incorporating a secondary or tertiary amine.

24. (previously presented) The chemical compound of claim 23, wherein the linker is an N-methylamino linker.

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25. (previously presented) The chemical compound of claim 22, wherein the linker is a substituted carbon chain incorporating an aryl group.

26. (previously presented) The method of claim 12, wherein the linker is a substituted carbon chain.

27. (previously presented) The method of claim 26, wherein the linker is a substituted carbon chain incorporating a secondary or tertiary amine.

28. (previously presented) The method of claim 27, wherein the linker is an N-methylamino linker.

29. (previously presented) The method of claim 27, wherein the first and second hsp-binding moieties are each an ansamycin antibiotic.

30. (previously presented) The method of claim 12, wherein the first and second hsp-binding moieties are each an ansamycin antibiotic.

31. (previously presented) The method of claim 13, wherein the linker is a substituted carbon chain.

32. (previously presented) The method of claim 31, wherein the linker is a substituted carbon chain incorporating a secondary or tertiary amine.

33. (previously presented) The method of claim 32, wherein the linker is an N-methylamino linker.

34. (previously presented) The method of claim 32, wherein the first and second hsp-binding moieties are each an ansamycin antibiotic.

35. (previously presented) The method of claim 13, wherein the first and second hsp-binding moieties are each an ansamycin antibiotic.

36. (previously presented) The method of claim 13, wherein the patient treated suffers from a cancer expressing a HER-family tyrosine kinase.

37. (previously presented) The method of claim 36, wherein the cancer is breast cancer.

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38. (previously presented) The method of claim 36, wherein the cancer is ovarian cancer.

39. (previously presented) The method of claim 36, wherein the cancer is pancreatic cancer.

40. (previously presented) The method of claim 36, wherein the cancer is gastric cancer.